

Title (en)
ELECTROSTATIC DISCHARGE PROTECTION POWER RAIL CLAMP WITH FEEDBACK-ENHANCED TRIGGERING AND CONDITIONING CIRCUITRY

Title (de)
STROMSCHIENENKLAMMER ZUM SCHUTZ VOR ELEKTROSTATISCHER ENTLADUNG MIT RÜCKKOPPLUNGSVERBESSERTEM TRIGGERN UND KONDITIONIERUNGSSCHALTUNG

Title (fr)
PINCE A RAIL DE PRISE DE COURANT POUR LA PROTECTION CONTRE LES DECHARGES ELECTROSTATIQUES ET AYANT UN CIRCUIT DE DECLENCHEMENT ET DE CONDITIONNEMENT A REACTION AMELIOREE

Publication
EP 1817827 A4 20110928 (EN)

Application
EP 05849436 A 20051114

Priority
• US 2005041611 W 20051114
• US 98735904 A 20041112

Abstract (en)
[origin: WO2006053337A2] Electrostatic discharge protection circuitry includes a timing circuit (12) operably coupled between the high supply side and low supply side of an associated circuit (10). The timing circuit has an RC node (RC) used for triggering a series of inverters (14, 20, 30, 40) configured to control an ESD dissipation device (60) operably coupled to the high supply side node and the low side supply node of the circuit. A feedback transistor network (72, 74) and a feedback conditioning network (50) is provided for ensuring that the ESD device is held on during an ESD event.

IPC 8 full level
H02H 9/04 (2006.01); **H01L 27/02** (2006.01); **H02H 3/22** (2006.01); **H02H 9/00** (2006.01)

CPC (source: EP US)
H01L 27/0285 (2013.01 - EP US); **H02H 9/046** (2013.01 - EP US)

Citation (search report)
• [A] US 2003214768 A1 20031120 - LIN SHI-TRON [TW], et al
• [A] US 5311391 A 19940510 - DUNGAN THOMAS [US], et al
• [A] US 6552886 B1 20030422 - WU KE [US], et al
• [A] US 5508649 A 19960416 - SHAY MICHAEL J [US]
• See references of WO 2006053337A2

Designated contracting state (EPC)
DE FR GB

DOCDB simple family (publication)
WO 2006053337 A2 20060518; WO 2006053337 A3 20060803; CN 101099278 A 20080102; EP 1817827 A2 20070815; EP 1817827 A4 20110928; EP 1817827 B1 20120801; US 2006103998 A1 20060518; US 7196890 B2 20070327

DOCDB simple family (application)
US 2005041611 W 20051114; CN 200580046235 A 20051114; EP 05849436 A 20051114; US 98735904 A 20041112